



PARKING MATTERS



Technical Report 2.1 SUMMARY OF BEST PRACTICES

Prepared for the
Chatham County - Savannah Metropolitan Planning Commission
and the
City of Savannah Department of Mobility and Parking Services

July 2016



Prepared by
Nelson\Nygaard Consulting Associates in partnership with
Symbioscity | VHB | Carl Walker, Inc.

This page intentionally left blank for double-sided printing.

Technical Report 2.1

Summary of Best Practices

This memorandum provides a summary of best practices for parking policies and strategic approaches around the United States. It is intended to provide comparable examples of approaches that would be relevant to addressing issues in central Savannah.

The outcomes of the Parking Matters study will be a set of recommendations for policy and service enhancements for improving the function and user experience of the parking system as well as to providing a better connected and accessible downtown overall. The study's public involvement activities engaged a broad set of stakeholders and community members to identify several core issues related to these objectives. These issues have formed the basis for identifying these best practices, and are laid out in the following sections:

- 1. Parking System Tools.** In order to achieve better integration between on-street and off-street parking resources, a series of parking system tools, and examples of cities that have employed these tools, have been identified to improve parking management in central Savannah. Parking pricing tools may be used to better balance supply and demand in the downtown area without the immediate expansion or construction of new parking facilities.
- 2. Access for All Users.** Parking should be viewed less as a set of individual on-street facilities, garages, and surface lots, and more as an integrated and cohesive system. Current practice recognizes the value of coordinating the price of on-street and off-street parking in order to better manage demand in a downtown area, and incentivize off-street parking in premium locations and to more highly value on-street parking in those same areas.

- 3. Policy Tools for Long-Term Planning.** Savannah can benefit from a variety of policy approaches that ensure new development addresses its own parking demand in ways appropriate for downtown, and that the increased importance of downtown as a visitor destination is supported by the overall parking and transportation system.
- 4. Integrated Mobility Options for City Centers.** Providing a networked approach to transportation options in downtown Savannah will facilitate movement to and from the center city, as well as around it. There are many different transportation assets available in downtown, **although there is opportunity to refine and re-purpose these services to work in a more cohesive, integrated manner and extend the comfortable walking distances from parking facilities—or reduce the need to park altogether.

Section 1

Parking System Tools

One of the primary observations of the Parking Matters study is that there is room for better integration between on-street and off-street parking resources. Many downtown residents and stakeholders perceive that there is not sufficient parking to meet demand, although the Parking Matters study's observations noted many instances of parking facilities not being fully utilized. This points to opportunities for rethinking how parking can be managed. Downtown Savannah's parking supply is a system and should be treated and managed as such.

Traditionally, a downtown district faced with demand for parking that is apparently in excess of supply might initially attempt to increase capacity by building more parking facilities. While the construction of new facilities will certainly improve the overall ratio of occupied spaces to vacant spaces, without appropriate parking management measures, demand for prime front-door spaces will remain – leaving places like Broughton Street as heavily used as they are today. Nonetheless, increases in Savannah's supply may be a future need for downtown, and in the short term there is opportunity to enhance supply by better aligning supply and demand. This has the following objectives:

- Marginally increasing the capacity of existing facilities with heavy utilization.
- Making more efficient use of existing facilities with excess capacity.
- Making the decision process on what parking spaces to use clearer and more intuitive.

SETTING AND ADJUSTING PRICING

Savannah's current parking price rates are set by City ordinance, with three different on-street prices allowed and general designations of where these rates apply. However, the City might be able to balance demand and supply by changing parking rates. Revising the City's parking ordinance each time in order to alter prices is cumbersome and subject to political pressure. Giving the Mobility and Parking Services director more authority to alter parking prices provides the system greater flexibility to balance demand and parking availability.

Seattle

Seattle provides an example of a more modern approach to setting different prices. In late 2010, the Seattle City Council adopted a new policy that

focused on measurement and technical criteria for setting parking rates. The ordinance directed the Seattle Department of Transportation (SDOT) to collect on-street parking conditions data and determine whether changes should be made to parking rates and hours of operation to maintain target occupancy of 75% to 88%, or 6 to 7 spaces out of 8.

The adopted ordinance sets hourly rates between \$1 and \$4, and provides the SDOT director with the authority to adjust rates within this range, and to vary rates by location, time of day, and other considerations. According to the Seattle Municipal Code (11.16.121), rates are set based on technical analysis to maintain one or two open spaces on each block face throughout the day to:

- Support neighborhood business districts by making on-street parking available and by encouraging economic development;
- Maintain adequate turnover of on-street parking spaces and reduce incidents of meter feeding in commercial districts;
- Encourage an adequate amount of on-street parking availability for a variety of parking users, efficient use of off-street parking facilities, and enhanced use of transit and other transportation alternatives; and
- Reduce congestion in travel lanes caused by drivers seeking on-street parking.

Since implementation, SDOT has regularly documented on-street parking utilization and made considerable changes to rates and hours of operation based on the previous year's parking data. The changes have varied depending on neighborhood conditions and include rate increases, rate decreases, maximum time limit increases, and evening hour extensions. Some areas were split into smaller districts with different rates or time limits. New parking districts with regulation and metering were added as well.

Results from the 2011 rate adjustments found that in four districts where rates were increased, occupancy subsequently dropped to target occupancy of 1 to 2 available spaces per block (or roughly 80-90 percent occupancy). In seven districts, where rates remained the same, occupancy sometimes went up and sometimes went down. In the eleven districts where rates were decreased, there was no consistent change in parking demand. The city found that in areas where parking occupancy has traditionally been low, rate reductions did not attract new parkers.

In addition, SDOT employed a creative and friendly public outreach strategy to advise the general public of upcoming changes, allowing for general awareness without a need for an extensive public process each time rates have changed.



Part of Seattle's successful approach to its program of adjusting pricing to adequately reflect demand is ongoing communication between the City and customers. In addition to a Web presence, the City has also included handout cards, flyers and other print materials in its promotional efforts.

Section 2

Access for All Users

Although the Parking Matters study leadership committees already represent a broad group of government agency and private organization stakeholders, the study team also met with many of them one-on-one to discuss specific concerns for downtown.

INTEGRATING ON-STREET AND OFF-STREET PRICING

Savannah's public parking supply includes both on-street and off-street parking spaces. As in most cities, parking customers motivated by several different factors make a decision between these two. Price is typically one of these factors, but in Savannah price strongly favors use of on-street parking—especially after on-street metering ends at 5 pm on weekdays. Current practice recognizes the value of on-street spaces, especially for shorter stays, and sets pricing accordingly.

Berkeley, California

In Downtown Berkeley, hourly rates and time limits in both the garages and on street were reconfigured to incentivize more off-street parking in premium locations. On-street parking in these locations is priced at higher rates than garages. Visitors staying for two hours who wish to be in these areas have the option of spending \$4.50 (and risk a ticket for staying past the two-hour limit), or pay \$4.00 for use of the garage.

Seattle, Washington

As discussed in the previous section, the Seattle Department of Transportation (SDOT) policy for rate adjustment allowed modification of rates, time limits, and meter hours of operation in 22 of 31 paid parking areas (comprising 12,000 City-metered spaces) across the city. Examples of changes that have occurred include the following:

- Increased hourly rates in nine areas/subareas/ time-periods where occupancy exceeds targets
- Decreased hourly rates in seven areas/subareas/ time-periods with low occupancy
- Extended meter hours of operation to 8 PM in five areas with high evening demand

- Initiated time-of-day variance in parking rates in the Pioneer Square neighborhood (consistent with widely variant occupancy rates during AM and PM periods)

For the time being, SDOT has used zone-based pricing and time limits, based on a \$1 to \$4-per hour range. However, new meter technology that the City has adopted allows for variable pricing at different times of day (as in Pioneer Square), and this may eventually expand to a larger area where rates vary as a rule.

Southeastern Cities

Many peer cities in the Southeastern United States currently price parking into evening and weekend hours to respond to higher levels of demand. Additionally, it is not just large regional cities (like

Atlanta or Nashville) taking such actions. Several popular small and mid-size Southern cities and destinations, including Charleston, Asheville, and Athens, charge for parking on Saturdays.

These cities have all contended with competing demands for downtown parking, political pressure for parking to remain unregulated and free during select times, and concern that extension of metered hours and increases in prices will hurt business prospects in the areas where changes are being made. While some communities have forgone any increases in price or regulation, others have expanded their parking regulation and have not experienced negative consequences.

Table 1 below lists examples of Southeastern cities and their current hours of regulation and price for on-street public parking.

Table 1: Example Parking Hours and Rates in in the Southeast		
City	Parking Rate	Time of Pricing
Atlanta	\$2 per hour	Mon - Sat, 7AM to 10PM, varying by a series of purpose-based district definitions. No Sunday enforcement.
Nashville	\$1.50 per hour in the central business district	Mon - Sat 8AM to 6PM
Louisville	\$1.25 to \$1.50 per hour	Mon - Sat 7AM to 6PM
Charleston	\$0.75 per hour	Mon - Sat 8AM to 6PM
Austin	\$1.00 per hour	Mon - Sat 8AM to 6PM
Asheville	\$1.00 per hour	Mon - Sat 8AM to 6PM
Athens	\$0.75 per hour	Mon - Sat 8AM to 10PM

Section 3

Policy Tools for Long-Term Planning

Apart from day-to-day management of existing parking resources, parking demand patterns into the future will respond to new land development and activities downtown. Savannah can benefit from a variety of policy approaches that ensure new development addresses its own parking demand in ways appropriate for downtown, and that the increased importance of downtown as a visitor destination is supported by the overall parking and transportation system.

REDUCING MINIMUM PARKING REQUIREMENTS

Technical Report 4.1 on Land Use and Modeled Parking Demand demonstrated that conventional parking requirements such as those in Savannah's current zoning ordinance are often leading to more parking than is actually needed for an area.

These minimum requirements in zoning were first enacted to protect certain areas, especially residential neighborhoods, from spillover from other adjacent land uses that had not provided sufficient parking. The practice has generally followed one guidance document, the Institute for Transportation Engineers (ITE) Parking Generation manual, which determined a range of parking requirements for a variety of land uses based on surveys of actual sites and parking behavior. However, over time the maximum end of the ranges observed in ITE's studies became the minimum requirement in many communities, generally leading to an over-supply of parking.

San Diego

The San Diego Municipal Code uses transit infrastructure as the primary basis for reductions in minimum parking, though it also recognizes the lower rates of auto ownership and use in lower income communities. The Code allows reduced minimum parking requirements for residential, office, retail, institutional, and industrial uses in designated transit areas and for residential uses in designated very low income areas.

For residential uses, the minimum parking requirements can be reduced in multi-family residential developments, generally depending on the number of bedrooms. For non-residential uses, reduction factors generally depend on nearby transit infrastructure. Although the potential minimum reductions depend on multiple factors in both residential and non-residential cases, reductions generally amount to around 85 percent of the original, baseline parking requirement.

MITIGATING MINIMUM PARKING REQUIREMENTS WITH IN-LIEU PAYMENTS

In addition to reduced minimum requirements allowing a lesser parking footprint, some urban districts similar to downtown Savannah are also allowing payments in-lieu of providing parking for a development. This is useful in that it allows smaller, more constrained development sites to be economically viable without needing to use space for parking, and lets public agencies with regulatory authority hold funds in reserve and help cover the costs (or service debt) associated with new parking construction.

Santa Monica, California

Santa Monica allows in-lieu payments with a one-time fee of \$20,000 per space. This is used for all parking requirements and development applicants may elect to waive all parking provision through the in-lieu payment. This in-lieu allowance was previously established through a yearly assessment, charging a fee per square foot of leasable space each year. However, developers and property owners felt that the one-time, up-front fee allowed a more user-friendly approach and made it easier to calculate and amortize costs than an indefinite yearly obligation.

The City of Santa Monica based this fee on pro formas for various types of development, supported with stakeholder consultations and a review of peer cities. It is worth noting, however, that the cost is actually less than what is typical for construction of new parking, which in the Los Angeles area typically ranges from \$35,000 to \$55,000 per space. This is effectively a subsidy on the part of the City, but it allows the City a position of leverage and flexibility on when and how it provides parking. The City has used this approach to focus parking supply, especially in its downtown district, on publicly available garages that also serve private uses.

In addition, the City has also made flexible use of the fee beyond new parking construction, including leasing of privately held spaces that are underutilized, restriping garages and facilities to increase capacity, implementing trip reduction measures (wayfinding, access, real time information, pedestrian and bicycle improvements, and other travel demand management approaches), and making contributions to downtown shuttles and commuter subsidy programs.

Montgomery County, Maryland and Orlando, Florida

These are both examples of local governments allowing fees to be used to finance the construction and management of parking spaces in centrally located public garages. These garages are intended to serve various developments, including ones that opt for in-lieu fees instead of providing on-site parking. Orlando, like Santa Monica, allows a developer to substitute all required parking spaces with the in-lieu fee, but does require the first space in every base requirement ratio (such as the first space out of every four that would be required for a unit of leasable floor area in a development) to be provided through the in-lieu fee.

Coconut Grove, Miami, Florida

Coconut Grove is a pedestrian-oriented, entertainment, dining, and shopping village in southern Miami, and its mix of commercial and visitor-based uses is similar to downtown Savannah's. It is also a relatively built-out district, and any redevelopment that increases density also increases the need for transportation access and parking.

To maintain Coconut Grove's continuous street frontage and keep it attractive to pedestrians, city planners established flexible parking requirements. Developers or property owners have three choices for satisfying minimum parking requirements: they can provide off-street parking, contract spaces elsewhere, or pay in lieu fees. With little space left to develop and high land costs, most property owners choose to pay

the \$50 per space per month fee to the city and use the land for more productive, revenue-generating purposes. The city uses the in-lieu fees to provide shared, structured parking, improve transit service, and maintain the sidewalks and pedestrian amenities. By investing the in-lieu fees in a combination of parking and other improvements, the city helps to keep Coconut Grove walkable and maintain the attractive aesthetic character of the area.

SHARED PARKING

Many urban districts similar to downtown Savannah have promoted greater use of shared parking, allowing multiple land uses to rely on the same parking facility and provide an amount of parking less than the sum of the requirements for the individual uses represented. Technical Report 4.1, which featured model-based estimates of parking demand, provides additional detail on how this principle works with actual uses in central Savannah.

The key element of shared parking arrangements in zoning is a recognition of the different peak parking demand hours for different land uses. By default, many ordinances require the sum of the requirements for each use, although those with shared parking provisions will allow exceptions.

These exceptions generally fall into two categories: detailed instructions for computation of shared parking requirements and more general discretion given to a planning director (or other zoning decision-maker) regarding how peak-demand levels for uses are to be balanced for shared parking. While there may be good reason to allow planning staff to guide or even have final determining authority in setting the amount of parking to be provided, best practices in zoning define a methodology for a development applicant to calculate the amount of parking that would be required, ensuring transparency and reliability in defining a developer’s obligations.

Minneapolis

The City of Minneapolis has a detailed section on shared parking in its zoning ordinance, with specific instructions for applicants on computation of the amount of parking required. This ordinance actually defines different utilization levels for different land uses at different times of the day, allowing the time period with the greatest overall intersection of demand to be the basis for how much parking is provided. Developers apply the utilization ratios in Table 2 below to their overall mixed-use program and essentially add the columns, selecting the parking rate with the highest aggregate total of any of the six time periods.

Table 2: City of Minneapolis Shared Parking Calculation Methodology						
Use	Weekday 2 am to 7 am	Weekday 7 am to 6 pm	Weekday 6 am to 2 am	Weekend 2 am to 7 am	Weekend 7 am to 6 pm	Weekend 6 am to 2 am
Office	5%	100%	5%	0%	10%	0%
Retail Uses	0%	90%	80%	0%	100%	60%
Restaurant	10%	70%	100%	20%	70%	100%
Residential	100%	60%	100%	100%	75%	90%
Hotel Rooms	100%	50%	100%	100%	50%	100%

Arlington, VA (Columbia Pike)

The Columbia Pike corridor of Arlington County, Virginia, presents a model of parking management where the private sector provides most of the public, off-street supply. This is due to the historical development patterns of the area, in which individual parcels developed under the direction of a zoning ordinance that required each to provide its own parking. Over time, while this has generally kept the aggregate parking supply meeting overall demand on the corridor, it has led to restrictions on use—or disallowing parking for the establishment on another property—and has led to difficulty managing special peak demands at particular locations and allowing the redevelopment of properties.

Instead, Arlington requires private owners and operators to make some or all of their parking publicly accessible. This is specified in the County's zoning ordinance, and designation of the spaces to be made publicly available is a requirement for site plans.

The upshot of this requirement is that the Columbia Pike corridor now has greater flexibility in managing the dynamics of a maturing, evolving corridor that is adding new uses as it redevelops. Arlington's ordinance also allows up to 100 percent of all required parking to be provided off-site if the said parking spaces are located within a ¼-mile radius of the subject site and affected properties enter into a legally binding agreement. In addition, Arlington allows new on-street parking spaces created in conjunction with the development to be counted toward the minimum requirement for shared parking.

The County also has a limited number of development agreements in place allowing private parking to be used as public supply. The County has not assumed any liability or insurance requirements

for these spaces, but instead includes assumption of those responsibilities in the agreement it has with private parking owners.

TRANSPORTATION DEMAND MANAGEMENT (TDM) IN ZONING

Some communities, faced with the dual challenges of high transportation demand and limited funding for infrastructure expansion, have enacted policies that encourage travel other than driving alone or at peak travel periods. The transportation industry refers to this overall approach as transportation demand management (TDM), and specific TDM practices include ridesharing (such as carpooling or vanpooling), cash incentives or subsidies for alternative forms of transportation, and employer-based approaches such as telecommuting and flexible work hours.

Cambridge, Massachusetts

Cambridge has long included TDM measures in development review, with a formal TDM Ordinance adopted in 2006. The ordinance identifies a series of TDM measures and defines thresholds for when they take effect and become effective requirements of development. Mandated use of a TDM program is triggered by an increase in off-street parking (as little as one space), with development adding twenty spaces requiring a more involved level of commitment.

The program applies to commercial developments, and generally defines the following requirements:

- Small projects (locations with 5 to 19 parking spaces added) require a set of three TDM strategies, at least one from each level of effectiveness as shown in Table 2). These are only subject to a one-time implementation and do not need to set performance targets or reporting.
- Large projects (locations with 20 or more parking spaces) require the project to define a mode share commitment, reducing vehicle trips to and

from the development to agreed-upon levels (or at least not allowing these to be reduced further). Projects are also required to adopt a more comprehensive set of TDM strategies and provide annual monitoring and reporting to the City of Cambridge.

Table 2: Cambridge TDM Ordinance: Strategies by Level of Effectiveness

Robust	Moderate	Minimal
Market-rate parking or cash-out/ Transportation Benefit	Raffle for non-SOV employees	Emergency Ride Home Program
Daily parking rate equal to a portion of monthly rate, no monthly pass	Carshare parking spaces	Flexible work hours or telecommuting
HOV parking discount	10% HOV preferential parking spaces	Carpool/vanpool ridematching
100% Transit subsidy	Pre-tax transit purchase	Promotion of location convenient to public transportation on brochures and website
Free shuttle—Private or EZRide	Bus shelters	Transportation Management Association membership
Park-and-ride reimbursement	Annual transportation event	Transportation Coordinator
Subsidy for walkers and bicyclists	Bike repair service	Shower/locker for walk/bike employees
Donate Hubway station	Elevator large enough for 2 bikes placed horizontally on the floor	Bike buddy matching
Vanpool subsidy	EV charging station—Level 2 or higher	Transportation bulletin board in central location, intranet
Employees paid for days they carpool		New employee transportation information packet

REDUCE BARRIERS TO CARPOOLING

Throughout the United States, carpooling has not continued to rise in popularity to the same degree that other demand-management measures have. However, emerging technologies such as rideshare pool applications and open-source participant databases point to future potential for carpooling to grow again in importance, and current best practices are to designate parking spaces in desirable locations to incentivize carpooling and ridesharing.

Among these emerging technologies, transportation network companies such as Uber and Lyft have rapidly spread across American cities, and Uber currently operates in Savannah. This growth has been fueled in part by the streamlined hailing experience that provides instant, on-demand access to these companies' services to smartphone users. More importantly, however, customers of these services frequently enjoy lower costs through the companies' use of non-commercially licensed drivers in private vehicles. These services are still emerging and, as such, do not yet have a uniform industry standard for regulation and risk management, with broad criticism from taxi service providers that transportation network companies are not subject to the same regulatory requirements. Local and state government efforts to balance consumer preference for competitive prices and convenience with a mandate to regulate services in the interest of public safety are ongoing and evolving.

In addition, technologies currently in development but not yet available to the general public, such as self-driving vehicles, offer further potential to make carpooling easier by making indirect routes to a destination less of a concern to commuters and thus allowing more passengers per vehicle.

Portland, Oregon

Portland has one of the country's most comprehensive sets of requirements for parking that is dedicated to carpool users. In any office, industrial, and institutional uses where there are more than 20 parking spaces on the site, the following standards must be met:

- Five spaces or five percent of the parking spaces on site, whichever is less, must be reserved for carpool use before 9:00 AM on weekdays. More spaces may be reserved, but they are not required.
- The spaces will be those closest to the building entrance or elevator, but not closer than the spaces for disabled parking and those signed for exclusive customer use.
- Signs must be posted indicating these spaces are reserved for carpool use before 9:00 AM on weekdays.

Section 4

Integrated Mobility Options for City Centers

Downtown Savannah today features a variety of mobility services and options, discussed in detail in Technical Report 3.2. These are all assets for downtown, although there is opportunity to refine and repurpose these services to work in a more cohesive, integrated manner and extend the comfortable walking distances from parking facilities—or reduce the need to park altogether.

DESIGNATING A MOBILITY COORDINATOR

Today, downtown Savannah's transportation services are the responsibility of multiple different agencies, each with different decision-making bodies and different sources of funding. This is certainly not unique to Savannah, but it does point to potential challenges in coordination and even potential missed opportunities for providing streamlined, coordinated services that meet the broad range of transportation needs for downtown.

While the reality of different agency structures and responsibilities may keep these different responsibilities in place, there are means of coordinating the services of different agencies and—most importantly—sharing knowledge of what each is doing in an effort of combining resources for a more productive outcome.

Ann Arbor, Michigan Downtown Development Association

Ann Arbor's Downtown Development Association (DDA) has been responsible for parking management in the city's central district and adjacent to the University of Michigan campus. It has based its overall service offerings on core principles of how transportation and parking should function in an active downtown with a high degree of desire for access.

1. Price of parking is understood to be the most direct and effective means of managing demand, by time and location, and as such DDA prices all parking options distinctively, based on their relative market demand.
2. Because parking is priced relative to demand, the growth in downtown access and travel demand is understood to invariably increase

parking demand, will also generate more revenue to either expand supplies or improve/expand management and demand-reduction efforts.

3. With an expanded set of options for getting to and moving around downtown, parking is no longer a critical means of downtown access. As a result, DDA supports other non-single occupancy vehicle means of access and mobility, both for their own purposes and merits in keeping Downtown vibrant and equitable, and for purposes of reducing parking demand where travel by car can be shifted to travel by means other than single occupant vehicles.

MyRide: Ann Arbor, Michigan

MyRide is a Mobility Management service provided by the Ann Arbor Transportation Authority, that offers transportation coordination to transit dependent individuals. It is not part of the Ann Arbor DDA previously mentioned. Transportation coordination is based on the individual's trip needs in Washtenaw County and select areas in Jackson, Lenawee, Livingston, Monroe, Oakland, and Wayne Counties.

Although MyRide does not provide direct transportation services, it does coordinate and share information on transit services through a network of existing public, private, and non-profit human service transportation providers. The intent of this is to provide a seamless system of service for transit users, and a set of private taxi and limousine licensed transportation providers make up part of the network to complete trips where transit service is not immediately available.

MyRide's service is based on a direct customer service resource, including a telephone call center. Customers may consult with service coordinators to which one or ones best satisfies the travel needs of the individual. Information and referrals are also provided on the available transportation options in

Washtenaw and surrounding counties. routes and trips; matches customer to the most appropriate service; assesses ability to pay fares; and/or schedules trips with transportation providers from the provider network.

The program also provides limited fare assistance, which pays a portion of transportation fares for specific types of trips taken by individuals who are not able to use existing public transportation services for a variety of reasons, such as

- Customer doesn't have a car
- Customer origination and/or destination is not on a public transportation bus line
- Customer travel time is not within the local public transportation hours of operation

The amount of assistance provided is based on passenger income and the length of time service is needed.

STREAMLINING AND BRANDING DOWNTOWN TRANSIT SERVICE

Today, there are multiple transit options in Savannah and these complement a variety of private, tourist-oriented circulator shuttle services.

art Shuttle: Englewood, Colorado

Englewood's fare-free circulator shuttle, art, provides service to 19 stops and connects the CityCenter Englewood, businesses in downtown Englewood, and the medical facilities in and near Craig Hospital and Swedish Medical Center. The shuttles run every fifteen minutes. Route maps are posted at each stop. art operates from 6:30 am to 6:30 pm Monday through Friday (excluding major holidays).

One noteworthy feature of the shuttle service is its incorporation of an innovative public art project that placed sculptures at some of the shuttle stops. The majority of the artwork is offered for sale, with the City keeping a portion of the proceeds from any sale. This not only provides a successful branding that has made the shuttle popular, but it also serves as an opportunity for civic engagement that has helped to add to identify and sense of place in Englewood's downtown.

Overall, the shuttle has been successful, enjoying ridership levels that have exceeded expectations since first opening in 2004. The shuttle is jointly funded by the Regional Transportation District (RTD) and the City of Englewood.

Charm City Circulator: Baltimore, Maryland

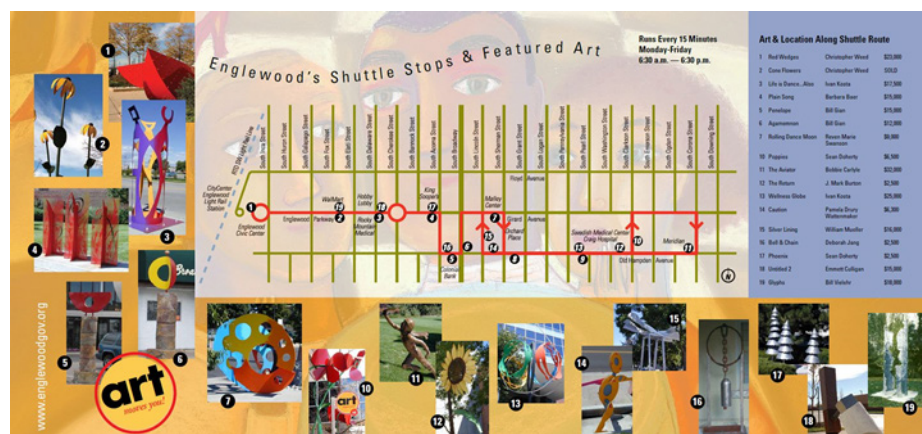
Simple, easy-to-understand routes can encourage circulator ridership, especially among riders who aren't accustomed to using transit. Baltimore's Charm City Circulator illustrates how clear, simple routing built a ridership base of both regular and infrequent users.

Citing the need to improve gaps in its transit network and reduce the pressure for downtown

parking, Baltimore began planning for a downtown circulator bus in 2008 and began service in 2010.⁴⁶ The circulator is operated by the Baltimore City Department of Transportation and separately from the Maryland Transit Administration. Funding for the Charm City Circulator comes from a tax on public parking.

By operating the service in-house, Baltimore not only can exercise more local control over the circulator, but can provide a uniquely branded product to attract both workers and tourists. The city has aggressively marketed the Circulator, setting aside 5% of the service's budget for marketing. It hired a marketing firm that publicizes the service using social media and purchased distinctive, sleek vehicles with bright, inviting livery.

The circulator has four lines connecting downtown Baltimore to major tourist destinations, shopping districts, and residential areas. The first line, the east-west Orange Route travels between the University of Maryland-Baltimore to Harbor East and Fells Point. The north-south Purple Route opened later that year and connects Mount Vernon Square to Federal Hill, followed by the Green Route between City Hall, Fells Point, and Johns Hopkins Hospital. A fourth route, the Banner Route, connects Fort McHenry to the Inner Harbor and opened last year. Each line has a generally linear route that's easy to remember and follow, though there are some couplets.



Englewood's art shuttle map. In addition to providing a practical and convenient circulator route, the service has also engaged local artists and offers their work for sale at stops.

All four lines are free. The Orange, Purple, and Green routes run at 10-minute headways, while the Banner Route runs at 15-minute headways. All four lines run from 6:30am to 9pm Monday through Thursday, 6:30am to midnight on Friday, 9am to midnight on Saturday, and 9am to 9pm on Sunday.⁴⁷

The Circulator has become very popular, attracting a mix of tourists, commuters, and shoppers. Over 350,000 rides were taken on the Circulator in November 2013.



USE OF PARKING REVENUE TO FUND OVERALL IMPROVEMENTS

Oklahoma City

Oklahoma City's Central Oklahoma Transportation and Parking Authority, known locally as EMBARK, is both a transit agency operating over 20 fixed routes in the Oklahoma City metropolitan area and a downtown/central city parking authority that manages both on and off-street parking resources. The agency is staffed by the Oklahoma City's Department of responsible for planning, developing, building, and operating a balanced downtown parking network and a regional public transit system. The funding for the agency blends funds from the Transportation and Parking Enterprise Funds for the City.

Although it receives funding from various sources related to the services and programs it operates, such as transit farebox revenue and capital grants, the bedrock of SFMTA's funding is parking revenue, and the majority of these revenues are distributed to other services in the agency's purview that are not as self-supporting.

San Francisco Municipal Transportation Agency

Practically all of San Francisco's surface transportation infrastructure and services are operated through a single agency, the San Francisco Municipal Transportation Agency (SFMTA). This agency Oversees transit, parking, traffic engineering, pedestrian planning, bicycle implementation, accessibility, and taxi regulation.

SFMTA was formed by voter initiative, led by a desire to see better integration among transportation agencies and a stronger, more transparent link between revenue collected from parking management and various other transportation sources in the City. The Agency assumed operations of these joint services in 2002

Conclusions

Many of the best practices documented in this report underscore the importance of integrating transportation infrastructure and services in downtowns. Parking management practices around the country offer useful examples of ways that Savannah's parking system might balance supply and demand more effectively. However, increasing mobility options for commuting to downtowns as well as moving around them is also a parking management strategy.

In the long run, the most effective approach to preserving parking availability and meeting the needs of a broad set of users is managing the need to park. Downtown Savannah's existing supply can serve a greater amount of businesses, residents and visitors when driving is not perceived to be the only feasible means of access to the area.

The discussions in other Technical Reports, especially Technical Report 3.2, outline the multiple transportation offerings already available downtown and their levels of service and use. The best practices documented in this report point to ways that this range of mobility options can work more effectively to complement downtown's parking system, especially the following:

1. Parking and transportation services should be seamless, with parking facilities and resources well connected to an entire district. This can reduce the need to park in immediate proximity to destinations.
2. Parking pricing is the most effective means of finding equilibrium between supply and demand, and should be set at a level at which this equilibrium can be reached. Seattle's example illustrates that parking pricing can and should be used to reach desired levels of parking availability first, with any additional revenue being a byproduct of that pricing strategy. Revenue is not the objective, availability is.
3. Changes to parking pricing that do result in an increase in revenue can help to provide other services that extend the usefulness of parking supply. Many of these services, such as shuttle circulators and demand management incentive programs, are essentially public services that may not be financially self-sustaining. However, the use of parking revenue to fund these services can reduce the need to continue increasing supply by constructing parking facilities, thus eliminating a potentially larger cost for the City of Savannah.